

INTERNATIONAL SEARCH REPORT

Int. Appl. No.
PCT/IB2004/002639

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 E21B47/06 E21B47/10

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 E21B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 3 913 398 A (CURTIS DECEASED M REX) 21 October 1975 (1975-10-21) column 2, line 45 - column 6, line 25	1, 19-21, 23-25
A	US 2001/020675 A1 (LEGGETT NIGEL ET AL) 13 September 2001 (2001-09-13) the whole document	1, 12, 19, 26, 34
A	US 6 427 125 B1 (GZARA KAIS ET AL) 30 July 2002 (2002-07-30) the whole document	1, 12, 19, 26, 34
A	WO 00/46485 A (KLUTH E L E ; VARNHAM M P (GB); CLOWES J R (GB); KUTLIK ROY (GB); SENS) 10 August 2000 (2000-08-10) the whole document	1, 12, 19, 26, 34
	----- -/-	



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

*** Special categories of cited documents :**

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- * & * document member of the same patent family

Date of the actual completion of the international search

28 October 2004

Date of mailing of the international search report

08/11/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Morrish, S

INTERNATIONAL SEARCH REPORT

Int'l Application No
PCT/IB2004/002639

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4 676 664 A (ANDERSON ROGER N ET AL) 30 June 1987 (1987-06-30) the whole document -----	1,12,19, 26,34

INTERNATIONAL SEARCH REPORT

 Int. Application No
 PCT/IB2004/002639

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 3913398	A	21-10-1975	NONE	
US 2001020675	A1	13-09-2001	US 6281489 B1	28-08-2001
			US 2002109080 A1	15-08-2002
			US 2003131990 A1	17-07-2003
			US 2004065439 A1	08-04-2004
			AU 730715 B2	15-03-2001
			AU 4902297 A	05-05-1998
			AU 753252 B2	10-10-2002
			AU 7273798 A	27-11-1998
			AU 7275398 A	27-11-1998
			CA 2264632 A1	12-11-1998
			CA 2268104 A1	16-04-1998
			CA 2288784 A1	12-11-1998
			CA 2409277 A1	12-11-1998
			DE 69816743 D1	04-09-2003
			DE 69816743 T2	03-06-2004
			EP 1357401 A2	29-10-2003
			EP 1357403 A2	29-10-2003
			EP 1357402 A2	29-10-2003
			EP 1355170 A2	22-10-2003
			EP 1355166 A2	22-10-2003
			EP 1355167 A2	22-10-2003
			EP 1355168 A2	22-10-2003
			EP 1355169 A2	22-10-2003
			EP 0910725 A1	28-04-1999
			GB 2354822 A ,B	04-04-2001
			GB 2354583 A ,B	28-03-2001
			GB 2362462 A ,B	21-11-2001
			GB 2362463 A ,B	21-11-2001
			GB 2364380 A ,B	23-01-2002
			GB 2364381 A ,B	23-01-2002
			GB 2364382 A	23-01-2002
			GB 2364383 A	23-01-2002
			GB 2364384 A	23-01-2002
			GB 2334104 A ,B	11-08-1999
			GB 2339902 A ,B	09-02-2000
			NO 991350 A	19-03-1999
			NO 991667 A	27-05-1999
			NO 995319 A	20-12-1999
			NO 20023857 A	19-03-1999
			NO 20032268 A	19-03-1999
			US 6268911 B1	31-07-2001
			WO 9815850 A1	16-04-1998
			WO 9850681 A1	12-11-1998
			WO 9850680 A2	12-11-1998
			US 2003205083 A1	06-11-2003
			US 2004043501 A1	04-03-2004
			US 6209640 B1	03-04-2001
			US 6302204 B1	16-10-2001
			US 6253848 B1	03-07-2001
US 6427125	B1	30-07-2002	AU 747053 B2	09-05-2002
			AU 5793900 A	03-05-2001
			BR 0004529 A	07-08-2001
			CA 2321486 A1	29-03-2001
			CN 1289890 A	04-04-2001
			GB 2354783 A ,B	04-04-2001

INTERNATIONAL SEARCH REPORT

In **na**l Application No
PCT/IB2004/002639

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 6427125	B1	ID 27328 A NO 20004875 A	29-03-2001 30-03-2001
WO 0046485	A	10-08-2000 AU 2867400 A CA 2326900 A1 EP 1070196 A1 NO 20005007 A WO 0046485 A2 US 6766703 B1	25-08-2000 10-08-2000 24-01-2001 01-12-2000 10-08-2000 27-07-2004
US 4676664	A	30-06-1987 AU 572544 B2 AU 3211284 A CA 1219078 A1 DK 120285 A EP 0155274 A1 FI 851047 A JP 60501875 T NO 851042 A WO 8500635 A1	12-05-1988 04-03-1985 10-03-1987 15-03-1985 25-09-1985 15-09-1985 31-10-1985 15-03-1985 14-02-1985